AMENDED IN ASSEMBLY MARCH 21, 2013

CALIFORNIA LEGISLATURE—2013-14 REGULAR SESSION

ASSEMBLY BILL

No. 127

Introduced by Assembly Member Skinner (Coauthors: Assembly Member Members Ammiano, Rendon, Stone, and Williams)

January 14, 2013

An act to add Section 18934.6 to the Health and Safety Code, relating to fire safety.

LEGISLATIVE COUNSEL'S DIGEST

AB 127, as amended, Skinner. Fire safety: fire retardants: building insulation.

Existing law authorizes the State Energy Resources Conservation and Development Commission to adopt regulations pertaining to urea formaldehyde foam insulation materials that are reasonably necessary to protect the public health and safety. Existing law provides that these regulations may include prohibition of the manufacture, sale, or installation of this insulation. Existing law also authorizes the Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation to establish by regulation insulation material standards governing the quality of all insulation material sold or installed in the state.

This bill would state that it is the intent of the Legislature to enact subsequent legislation that would reduce the use of flame retardants in plastic foam building insulation.

The California Building Standards Law requires all state agencies that adopt or propose adoption of any building standard to submit the building standard to the California Building Standards Commission -2-

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for approval or adoption. Existing law requires the commission to receive proposed building standards from state agencies for consideration in an 18-month code adoption cycle. Existing law requires the commission to adopt, approve, codify, update, and publish green building standards applicable to a particular occupancy, if no state agency has the authority or expertise to propose green building standards for those occupancies.

This bill would state that the Legislature finds and declares that it is in the best interest of the state to eliminate chemicals from building insulation, while preserving building fire safety and encouraging healthy building practices. The bill would require the commission to adopt, approve, codify, and publish, during its next code adoption cycle, standards that accomplish certain things, including maintaining overall building fire safety while giving full consideration to the long-term human and ecological health impacts associated with chemical flame retardants.

Vote: majority. Appropriation: no. Fiscal committee: no yes. State-mandated local program: no.

The people of the State of California do enact as follows:

- 1 SECTION 1. The Legislature finds and declares all of the 2 following:
 - (a) To improve energy efficiency and to reduce global climate change, the use of plastic insulation materials, such as polystyrene, polyisocyanurate, and polyurethane, is increasing in buildings and especially in green buildings.
 - (b) In the United States, flammability requirements for plastic foam insulations and other building materials are incorporated into building codes and fire regulations for building materials. To meet these requirements, plastic insulation materials have flame-retardant chemicals added to them, usually as halogenated organic compounds with chlorine or bromine bonded to carbon.
 - (c) Studies have shown that these halogenated organic compounds are associated with neurological and developmental toxicity and endocrine disruption, and are possible carcinogens.
 - (d) Flame retardants, whose primary use is in building insulation, are found at increasing levels in household dust, human-body bodily fluids, and the environment.

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(e) Code provisions regulating plastic foam insulations in buildings were first introduced in the early 1960s. Those code provisions do not specify that chemicals be added to foam plastic insulation, but in practice organohalogen flame-retardant compounds are added to meet test requirements.

- (f) Despite these requirements, in the 1970s, serious fires occurred from exposed foam plastic insulation. To address this issue, the 1976 Uniform Building Code required plastic foam insulation to be protected by a thermal barrier, usually as, or in the form of, 0.5-inch-thick gypsum wallboard.
- (g) Although, in most circumstances, the thermal barrier regulations have been deemed to be sufficient for fire safety, chemical flame retardants are still also required. Virtually all foam-plastic insulation materials in the United States today, including extruded and expanded polystyrene, polyisocyanurate, and spray polyurethane foam, are treated with halogenated flame retardants.
- (h) Many flame retardants are known to pose serious health and environmental hazards and are actively being banned or eliminated from use in many parts of the world.
- (i) Comprehensive investigations by fire-safety experts cast into doubt the contention that the addition of flame retardants, at the concentrations typically used in foam insulation, measurably improves fire safety.
- (j) The presence of flame retardants does not prevent foam plastic from burning and upon combustion can significantly increase hazardous products like smoke, soot, carbon monoxide, and potentially carcinogenic dioxins.
- (k) The Steiner Tunnel Test (ASTM E-84), the most common test procedure used to determine flammability, flame spread, and smoke developed, produces misleading results when applied to foam plastic insulation.
- (1) Flame retardants add to the cost of foam insulation materials while not appreciably enhancing fire safety. Thermal barriers, such as drywall, provide far greater protection against fire and fire-spread than flame retardants.
- (m) The International Code Council is considering adopting exemptions to flame spread and smoke developed requirements for foam plastics in the International Residential Code where

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adequate thermal barriers, such as 0.5-inch-thick gypsum wallboard or one-inch thick masonry or concrete, are present.

- (h) Given the additional cost of adding flame-retardant chemicals to plastic foam building insulation, their potential adverse health and ecological impacts, and the sufficiency of the thermal barrier, it is important to question whether their use is a necessary requirement for improved fire safety.
- (i) Therefore, it is in the best interest of the State of California to eliminate unnecessary chemicals from building insulation, while preserving building fire safety and encouraging healthy building practices.
- SEC. 2. It is the intent of the Legislature to enact legislation that would reduce the use of flame retardants in plastic foam building insulation while simultaneously ensuring that both fire safety and long-term human and ecological health are properly accounted for without a reduction in overall building fire safety.
- SEC. 2. Section 18934.6 is added to the Health and Safety Code, to read:
- 18934.6. (a) The Legislature finds and declares that it is in the best interest of the state to eliminate chemicals from building insulation, while preserving building fire safety and encouraging healthy building practices.
- (b) The commission shall adopt, approve, codify, and publish, during its next code adoption cycle, standards that accomplish both of the following:
- (1) Maintain overall building fire safety while giving full consideration to the long-term human and ecological health impacts associated with chemical flame retardants.
- (2) Ensure that there is adequate protection from fires that travel between walls and into confined areas, including crawl spaces and attics, for occupants of the building and any firefighters who may be in the building during a fire.